

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) A liquefied gas cryostat which comprises:  
inner and outer walls defining an evacuated housing;  
a multilayer insulation positioned between the inner and outer walls; and  
at least one radiation shield circumscribing the inner wall between the inner and outer walls so as to extend over an area of the inner wall which is contacted and cooled by liquefied gas in the cryostat when in use,  
wherein the radiation shield comprises a plurality of rods which are formed from a material which is thermally conducting and electrically insulating when the cryostat contains liquefied gas.
2. (Original) A cryostat according to claim 1 wherein the rods are formed from a sintered ceramic material, or sapphire or diamond powder composite.
3. (Previously Presented) A cryostat according to claim 2 wherein the rods are formed from alumina, aluminium nitride, or silicon carbide.
4. (Previously Presented) A cryostat according to claim 1 wherein the rods have a diameter of from 1 to 2 mm.
5. (Previously Presented) A cryostat according to claim 1 wherein the radiation shield comprises a glass reinforced plastic substrate on which the rods are positioned.
6. (Previously Presented) A cryostat according to claim 1 wherein the radiation shield comprises an end plate fixed to the substrate.

7. (Original) A cryostat according to claim 6 wherein the end plate is formed from alumina.
8. (Previously Presented) A cryostat according to claim 6 wherein the end plate has a thickness of from 1 to 2 mm.
9. (Previously Presented) A cryostat according to claim 1 wherein the radiation shield in use is cooled by being in contact with a venting tube of the cryostat through which gas is vented, as liquefied gas boils off, via a heat exchanger, for transferring heat from the radiation shield to the tube.
10. (Previously Presented) A cryostat according to claim 9 wherein the heat exchanger is fabricated from metal or a ceramic material.
11. (Previously Presented) A cryostat according to claim 9 wherein the heat exchanger is in the form of strips or rods or material.
12. (Previously Presented) A cryostat according to claim 10 wherein the heat exchanger comprises rods of aluminium.
13. (Previously Presented) A cryostat according to claim 1 which contains liquid helium.
14. (Previously Presented) A cryostat according to claim 1 which houses a Superconducting Quantum Interference Device for MRI or NMR scanning.
15. (Cancelled)